



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,703

08/25/2006

Nobuharu Ohsawa

0756-7801

3823

31780 7590 03/04/2009

ERIC ROBINSON

PMB 955

21010 SOUTHBANK ST.

POTOMAC FALLS, VA 20165

EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :
25 Aug 2006 (corrected), 11 Oct 2006 (corrected), 07 Nov 2008, 03 Dec 2008.

Art Unit: 1794

1. This Office action is in response to applicant's amendment filed November 21, 2008, which amends claim 50, cancels claims 34-49 and adds claims 68-70.

Claims 50-70 are pending.

2. The documents listed in the Information Disclosure Statements filed November 07, 2008 and December 03, 2008 have been considered and are made of record. (The International Search Report and Written Opinion documents that are listed in the December 03, 2008 IDS have been lined through since the same citations are of record on an earlier filed IDS.)

In the letter accompanying the IDS filed December 03, 2008, applicant requested that certain citations from the IDSs filed August 25, 2006 and October 11, 2006 be lined through, with corrected citations listed on the form filed December 03, 2008. The modifications have been made to the earlier forms as requested.

3. The rejection of claims 34-49 under 35 U.S.C. 112, 1st paragraph, as set forth in the Office action mailed August 20, 2008 is rendered moot by claim cancellation.

4. Claims 50-70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Present claims 50-67 define/require a subset of organometallic complexes in which a diphenylquinoxaline ligand, having thirteen possible positions for substitution, is substituted at eight of those positions with a substituent selected from the Markush group set forth in present independent claims 50 and 59, and the other five positions are unsubstituted (i.e. each of the five R variables that is hydrogen per the present independent claims). The presently required substitution pattern is not explicitly disclosed in the application as originally filed, and no specific examples of organometallic complexes within the scope of the present claims are set forth in the original disclosure. Accordingly, it is the examiner's position that present claims 50-67 are not supported by the original disclosure.

Present claims 68-70 define/require a subset of organometallic complexes in which a diphenylquinoxaline ligand is substituted at two positions on each of the phenyl groups with fluorine as shown in the formula in claim 68. (Claim 68 also defines various R variables, but there are no R variables in the formula.). The metal of the organometallic complex defined by claims 68 and 69, and required for the device of claim 70, is not defined. The application as originally filed disclosed two specific examples of iridium complexes having the formula shown in claim 68 (see paragraphs [0260]-[0284] on pages 80-87 in particular), but it is the examiner's position that the two disclosed iridium complexes do not provide sufficient support for the full scope of metal complexes encompassed by claims 68 and 69, and required for the device of claim 70.

5. Claims 68-70 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 68-70 are indefinite because M of the formula set forth in claim 68 is not defined.

The limitations of claims 68-70 are also not clear because claim 68 provides definitions for various R variables, but there are no R variables in the formula in claim 68.

6. Applicant's arguments filed November 21, 2008 have been fully considered but they are not persuasive.

Applicant argues that amended claims 50 and 59 are supported at least by formulae (67) and (72) as shown in paragraphs [0261] and [0277] of the specification. Applicant argues that new claims 68-70 are also supported by formulae (67) and (72).

The examiner does not agree that formulae (67) and (72) provide support for claims 50-67. Formulae (67) and (72) have hydrogen at the position corresponding to R^2-R^5 in the formulae shown in claims 50 and 59. The iridium complexes of formulae (67) and (72) are not within the scope of the complex defined in claims 50-57 and 59-66, and required for the device of claims 58 and 67.

The examiner agrees that the original disclosure, especially formulae (67) and (72), provide support for iridium complexes having the formula shown in new claim 68 wherein M is iridium (presuming that the definition of R variables is included in claim 68 in error, and the diphenylquinoxaline ligands are limited to the fluorine-substituted ligand structure shown in the

Art Unit: 1794

formula). However, the subject matter of new claims 68-70 is not fully supported by the original disclosure because claims 68-70 do not limit M of the formula shown in claim 68 to iridium.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 7:00 a.m. to 3:30 p.m. Monday-Friday.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

/Marie R. Yamnitzky/
Primary Examiner, Art Unit 1794

MRY
March 01, 2009